

20-8066



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

D3121-144
Job Sheet 195328



Part No: D3121-144

Job Qty: 12 pcs

Part Name: Bracket Assembly

11 pcs.



Part Weight: 0 lbs

Status: New 21

Priority: Medium

Job Created: 5/17/19

Job Tracking No:

DAS
21
9-89

Due Date: 5/31/19

June 21

Created By: Marie Lajeunesse

Type: Stock

Description:

Note: DWG REV E IPP Rev: Pick: A 04.02.18 New issue KJ/DS IPP Rev: B ECN 1060 07-11-12 DD verified by: EC IPP
Rev: C New Dimensions for Blank Size 08-07-23 JLM Verified By: EC

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier	Lead Time	
100	Bandsaw - 1	12 pcs	5/31/19	5/31/19	0.00	4.67	Bandsaw - 1		SBL 19/08/13
110	HAAS 4 Axis - B4B	12 pcs	5/31/19	5/31/19	0.36	0.00	HAAS - 1 - B4B		
							HAAS - 2 - B4B		
							HAAS - 3 - B4B		SBL 19/08/13
							HAAS - 4 - B4B		
120	QC 2	12 pcs	5/31/19	5/31/19	0.00	0.00	QC 2 - 1		
							QC 2 - 12		
							QC 2 - 14		
							QC 2 - 17		
							QC 2 - 19		
							QC 2 - 2		
							QC 2 - 20		
							QC 2 - 22		
							QC 2 - 23		
							QC 2 - 25		
							QC 2 - 32		
							QC 2 - 33		
							QC 2 - 35		
							QC 2 - 39		
							QC 2 - 4		
							QC 2 - 40		
							QC 2 - 44		
							QC 2 - 45		
							QC 2 - 48		
							QC 2 - 49		
							QC 2 - 50		
							QC 2 - 51		
							QC 2 - 52		
							QC 2 - 57		SBL 19/08/13
							QC 2 - 62		



Container No: S205301



Part: D3121-144

Job No: 195328

Serial No/Batch: S205301

Revision:

Inspector:

Exp Date:

Instructions: Various STC's

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
CANADA
TEL: 1 813 632-5200
Email: sales@dartaero.com
www.dartaerospace.com

Date: 09/13/19

Plex 5/17/19 9:32 AM Dart.lajeunesse.marie

5/17/2019

[Dart Hawkesbury] Job Sheet - Lajeunesse, Marie

130 QC 8	12 pcs	5/31/19	0.00 0.00	QC 2 - 63	
				QC 2 - 8	
				QC 2 - 66	
				QC 2 - 64	
				QC 2 - 65	
				QC 2 - 5	
				QC 2 - 71	
				QC 8 - 12	
				QC 8 - 14	
				QC 8 - 17	
				QC 8 - 20	
				QC 8 - 25	
				QC 8 - 3	
				QC 8 - 32	
				QC 8 - 33	
				QC 8 - 35	
				QC 8 - 39	
				QC 8 - 4	
				QC 8 - 44	
				QC 8 - 45	
				QC 8 - 49	
				QC 8 - 58	
				QC 8 - 8	
				QC 8 - 9	
				QC 8 - 68	
				QC 8 - 67	
140 Small Fab - 2 - B4B	12 pcs	5/31/19	0.00 0.67	QC 8 - 1 (A)	
				QC 8 - 47	
				QC 8 - 40	DAS 52 9-89
				QC 8 - 52	17/08/17
				QC 8 - 23	
				Small Fab - 1 - B4B	DAS 58 9-89
				Small Fab - 2 - B4B	SMB 20/08/17
				Small Fab - 3 - B4B	
150 QC 5	12 pcs	5/31/19	0.00 0.00	Small Fab - 4 - B4B	
				Small Fab - 5 - B4B	
				Small Fab - 6 - B4B	
				Small Fab - 7 - B4B	
				QC 5 - 10	
				QC 5 - 12	
				QC 5 - 17	
				QC 5 - 18	
				QC 5 - 19	
				QC 5 - 22	
				QC 5 - 24	
				QC 5 - 3	
				QC 5 - 43	
				QC 5 - 49	
				QC 5 - 51	
				QC 5 - 58	
160 Packaging 3-1 - Stock - B4B	12 pcs	5/31/19	0.00 0.00	QC 5 - 68	
				QC 5 - 9	
				QC 5 - 50	
				QC 5 - 30	
				QC 5 - 40	
				Packaging 3 - 1 - B4B	DAS 10 9-89
				Packaging 3 - 2 - B4B	SEP 18 2018
				Packaging 3 - 3 - B4B	
				Packaging 3 - 4 - B4B	

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				Packaging 3 - 5 - B4B	
				Packaging 3 - 6 - B4B	
				Packaging 3 - 7 - B4B	
				Packaging 3 - 8 - B4B	
				Packaging 3 - 9 - B4B	
				Packaging 3 - 10 - B4B	
				Packaging 3 - 11 - B4B	
				Packaging 3 - 12 - B4B	
				Packaging 3 - 13 - B4B	
				Packaging 3 - 14 - B4B	
				Packaging 3 - 15 - B4B	
				Packaging 3 - 16 - B4B	
				Packaging 3 - 17 - B4B	
				Packaging 3 - 18 - B4B	
				Packaging 3 - 19 - B4B	
				Packaging 3 - 20 - B4B	
				Packaging 3 - 21 - B4B	
				Packaging 3 - 22 - B4B	
				Packaging 3 - 23 - B4B	PC 57018
				Packaging 3 - 24 - B4B	
				Packaging 3 - 25 - B4B	
				Packaging 3 - 26 - B4B	
				Packaging 3 - 27 - B4B	
				Packaging 3 - 28 - B4B	
				Packaging 3 - 29 - B4B	
				Packaging 3 - 30 - B4B	
				Packaging 3 - 31 - B4B	
				Packaging 3 - 32 - B4B	
				Packaging 3 - 33 - B4B	
				Packaging 3 - 34 - B4B	
				Packaging 3 - 35 - B4B	
				Packaging 3 - 36 - B4B	
170 QC 21 - SA	12 pcs	5/31/19	0.00 0.00	QC 21 - SA - 21	
				QC 21 - SA - 70	
				QC 21 - SA - 53	

Part Op 100 - Bandsaw - Cut blanks: (1.250" x 2.000") 4.425" long

Descriptions: 110 - HAAS CNC Vertical Machine - 1-Machine D3121-114 as per Folio FA330 and Dwg D3121 Identify as D3121-114

120 - QC2- Inspect parts off machine FAI/FAIB

130 - QC8- Inspect parts - second check)

140 - Small Fab - Assemble D3121-143 as per Dwg D3121.

150 - QC5- Inspect part completeness to step on W/O

160 - Identify as per dwg & Stock Location:

170 - QC21- Final Inspection - Work Order Release

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
M17-4-B1.250X2.000	17-4 SS Bar 1.250 x 2.00	4.4160 ft (.368 ea)	100-Bandsaw - 1	5158304
D3121-21	Bolt	24 pcs (2 ea)	140-Small Fab - 2 - B4B	5172648
D3121-241	Bearing Assembly	24 pcs (2 ea)	140-Small Fab - 2 - B4B	5198292

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
100-Bandsaw - 1	M17-4-B1.250X2.000	4	22	0
140-Small Fab - 2 - B4B	D3121-21	24	30	0
	D3121-241	24	30	0

Part Specifications

Specifications could not be found.

DART AEROSPACE LTD		Work Order:	195328
Description: Bracket		Part Number:	D3121-114
Inspection Dwg: D3121	Rev: E	Page 1 of 2	

FIRST ARTICLE INSPECTION CHECKLIST

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
0.080	+/-0.010	.077	✓		Vern	
0.300	+/-0.010	.300	✓		Vern	
R0.375	+/-0.010	.375	✓		RG	
1.54	+/-0.030	1.543	✓		HG	
0.350	+/-0.010	.349	✓		HG	
R0.25	+/-0.030	.250	✓		RG	
Ø0.392	+0.002/-0.000	.3935	✓		P.G	
Ø0.201	+/-0.010	.200	✓		P.G	
0.100	+/-0.010	.099	✓		Vern	
2.540	+/-0.010	2.539	✓		Vern	
1.590	+/-0.010	1.591	✓		"	
0.160	+/-0.010	.160	✓		"	
0.400	+/-0.010	.398	✓		"	
1.220	+/-0.010	1.219	✓		HG	
1.600	+/-0.010	1.603	✓		Vern	
3.80	+/-0.030	1.799	✓		HG	
1.800	+/-0.010	1.802	✓		Vern	
R0.50	+/-0.030	.500	✓		RG	
0.130	+/-0.010	.128	✓		Vern mic. Sebd	
3.41	+/-0.030	3.396	✓		HG	
3.65	+/-0.030	3.644	✓		HG	
2.24	+/-0.030	2.210	✓		Vern	
45°	+/-0.1°	45°	✓		A.R	
R0.25	+/-0.030	.250	✓		RG	
3.97	+/-0.030	3.972	✓		HG	
R0.38	+/-0.030	.375	✓		RG	
Ø0.392	+0.002/-0.000	.3935	✓		P.G	
Ø0.201	+/-0.010	.200	✓		P.G.	
0.268	+/-0.010	.270	✓		Vern	
R0.260	+/-0.010	.260	✓		RG	
0.080	+/-0.010	.080	✓		Vern	
0.300	+/-0.010	.300	✓		"	
0.381	+/-0.010	.380	✓		"	
0.201	+/-0.010	.200	✓		"	
0.580	+/-0.010	.582	✓		"	

DART AEROSPACE LTD		Work Order:	195328
Description: Bracket		Part Number:	D3121-114
Inspection Dwg: D3121	Rev: E		Page 2 of 2

FIRST ARTICLE INSPECTION CHECKLIST

[illegible]

Measured by:	DAS	Audited by:	52 9-89	Preliminary Approval:	
Date:	57 9-89 19/08/89	Date:	19/08/89	Date:	

Rev	Date	Change	Revised by	Approved
A	03.12.08	New Issue P/O D3121-144	KJ/RF	
B	04.05.05	Dimensions changed/re-arranged per Dwg revision	KJ/JLM	
C	06.06.14	Dwg Rev. updated	KJ/JLM	
D	08.01.16	Dimensions updated per Dwg Rev E	KJ/EC/DD	
E	08.05.20	0.032 dimension was 0.32	KJ/DD	
F	13.10.22	Tolerance revised for Ø0.201 dimension	KJ	

Entered: _____ **Date:** _____



WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

NCR No.

Route update only

Job: <u>195328</u> Part No. <u>A3121-144</u>		DISPOSITION Rework ☐ Scrap ☒ Use-as-is ☐		DEPARTMENT/PROCESS <table style="width:100%;"> <tr> <td>Skid-tube ☐</td> <td>Cross tube ☐</td> <td>Eng. (Non-AW) ☐</td> <td>Engineering ☐</td> </tr> <tr> <td>Machining ☒</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Water Jet ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Supplier Quality ☐</td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Eng. (Non-AW) ☐	Engineering ☐	Machining ☒	Small Fab ☐	Prod. Eng. Coord. ☐	Water Jet ☐	Large Fab ☐	Finishing ☐	Rec/Store/Packaging ☐	Supplier Quality ☐																														
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Date: <u>19/08/17</u>		Sequence #: <u>130 Qc8</u>		QTY Affected: <u>1</u>		MRB (QSI042)																																													
Description Work Order Deviation				Disposition		Completed By <u>DAS 52 19/08/17</u> 9-89																																													
Spigot ϕ is oversize by 0.0006"				SCRAP		Lead hand / Supervisor <u>A- 19-08-21</u>																																													
						QC / QA Coordinator <u>DAS 68</u> 9-89 AUG 21 2019																																													
Root Cause <table style="width:100%;"> <tr><td>Operator</td><td>☒</td></tr> <tr><td>Manufacturing Process</td><td>☐</td></tr> <tr><td>Equip/Tooling</td><td>☐</td></tr> <tr><td>Handling/Preservation</td><td>☐</td></tr> <tr><td>Material</td><td>☐</td></tr> <tr><td>Product Improvement</td><td>☐</td></tr> <tr><td>Process Improvement</td><td>☐</td></tr> <tr><td>Human Factors</td><td>☐</td></tr> </table>		Operator	☒	Manufacturing Process	☐	Equip/Tooling	☐	Handling/Preservation	☐	Material	☐	Product Improvement	☐	Process Improvement	☐	Human Factors	☐	FAULT CATEGORY <table style="width:100%;"> <tr> <td>☐ Pressure/Forced</td> <td>☐ Contamination</td> <td>☐ Power Loss/Surge</td> <td>☐ Positioned Wrong</td> </tr> <tr> <td>☐ Bending</td> <td>☐ Misaligned/off center</td> <td>☐ Folio/Program</td> <td>☒ Outside Tolerance</td> </tr> <tr> <td>☐ Crushing</td> <td>☐ BOM/Route</td> <td>☐ Grain Direction</td> <td>☐ Drawing</td> </tr> <tr> <td>☐ Cracks</td> <td>☐ Broken/Damage/Defect</td> <td>☐ Weld</td> <td>☐ Finish</td> </tr> <tr> <td>☐ Crimp/Kink/Ripple/Wave/Twist</td> <td>☐ Incomplete/Unclear Instructions</td> <td>☐ Wrong Stock Pulled</td> <td>☐ Part Lost/Missing</td> </tr> <tr> <td>☐ Marks/Chatter</td> <td>☐ Drill Holes</td> <td>☐ Out of Sequence</td> <td>☐ Misread</td> </tr> <tr> <td>☐ Mislabeled</td> <td>☐ Fit/Function</td> <td>☐ Off-set/Set-up</td> <td></td> </tr> </table>						☐ Pressure/Forced	☐ Contamination	☐ Power Loss/Surge	☐ Positioned Wrong	☐ Bending	☐ Misaligned/off center	☐ Folio/Program	☒ Outside Tolerance	☐ Crushing	☐ BOM/Route	☐ Grain Direction	☐ Drawing	☐ Cracks	☐ Broken/Damage/Defect	☐ Weld	☐ Finish	☐ Crimp/Kink/Ripple/Wave/Twist	☐ Incomplete/Unclear Instructions	☐ Wrong Stock Pulled	☐ Part Lost/Missing	☐ Marks/Chatter	☐ Drill Holes	☐ Out of Sequence	☐ Misread	☐ Mislabeled	☐ Fit/Function	☐ Off-set/Set-up	
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Entered: 2L Date: Apr 13/2020



NCR No. 20-8066

WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

Route update only ☐

Job: <u>195 328</u> Part No. <u>D3121-114</u>		DISPOSITION Rework ☐ Scrap ☒ Use-as-is ☐		DEPARTMENT/PROCESS Skid-tube ☐ Machining ☒ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Eng. (Non-AW) ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Engineering ☐ Water Jet ☐ Supplier ☐ Quality ☐							
Date: <u>19/08/13</u>		Sequence #: <u>110</u>		QTY Affected: <u>5</u>		MRB (QSI042) DAS 55 9-89 MAR 24 2020					
Description Work Order Deviation 4 pieces: spigot dimension is over-sized + pieces not squared + vibration marks. 1 piece: tap broke in piece				Disposition - scrap and replace				Completed By DAS 57 9-89 <u>19/08/13</u> Lead hand / Supervisor <u>19-08-13</u> QC / QA Coordinator DAS 68 9-89 AUG 13 2019			
Root Cause Operator ☒ Manufacturing Process ☐ Equip/Tooling ☐ Handling/Preservation ☐ Material ☐ Product Improvement ☐ Process Improvement ☐ Human Factors ☐		FAULT CATEGORY <table style="width:100%; border: none;"> <tr> <td style="width:33%; vertical-align: top;"> ☐ Pressure/Forced ☐ Bending ☐ Crushing ☐ Cracks ☐ Crimp/Kink/Ripple/Wave/Twist ☒ Marks/Chatter ☐ Mislabeled </td> <td style="width:33%; vertical-align: top;"> ☐ Contamination ☐ Misaligned/off center ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Incomplete/Unclear Instructions ☐ Drill Holes ☐ Fit/Function </td> <td style="width:33%; vertical-align: top;"> ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain Direction ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☒ Off-set/Set-up </td> <td style="width:33%; vertical-align: top;"> ☐ Positioned Wrong ☐ Outside Tolerance ☐ Drawing ☐ Finish ☐ Part Lost/Missing ☐ Misread </td> </tr> </table>						☐ Pressure/Forced ☐ Bending ☐ Crushing ☐ Cracks ☐ Crimp/Kink/Ripple/Wave/Twist ☒ Marks/Chatter ☐ Mislabeled	☐ Contamination ☐ Misaligned/off center ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Incomplete/Unclear Instructions ☐ Drill Holes ☐ Fit/Function	☐ Power Loss/Surge ☐ Folio/Program ☐ Grain Direction ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☒ Off-set/Set-up	☐ Positioned Wrong ☐ Outside Tolerance ☐ Drawing ☐ Finish ☐ Part Lost/Missing ☐ Misread
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